

ABSTRACT OF THE DISCLOSURE

5 A force sensing element is provided with a gauge
portion and a plurality of electrodes. The gauge portion
is formed of an n-type semiconductor substrate whose
(100)-face serves as a main face, a p-type semiconductor
substrate whose (110)-face serves as a main face, or a p-
type semiconductor substrate whose (111)-face serves as a
main face, and is pressed in a thickness direction of the
10 semiconductor substrate upon receiving a force. The
electrodes are electrically connected to the gauge
portion such that a current path extending in a direction
corresponding to the thickness direction of the
semiconductor substrate is formed in the gauge portion.
15 The force sensing element thus constructed makes it
possible to detect a force with high precision.